

REMARKS

Applicants have amended Claims 9, 11, 18, 19, 28 and 51, and have canceled Claims 1, 3-5, 7-8, 29 and 50 without disclaimer or prejudice. Enabling support for the amendments can be found in the application as filed, and therefore no new matter is contained in the amendments. Reconsideration of the present application and allowance of resulting Claims 9-14, 18-28, 44-47, and 51 is respectfully requested in view of the amendments and following remarks.

I. Objection to the Drawings

The drawings were objected to by the draftsperson as outlined in form PTO-948. Specifically, the Draftsperson objected to the poor quality of figures 7-9, the margins of Figures 1, 2, 4, and 6, the character of the lines, numbers and text for Figures 1-9, the legibility of the numbers, letters and reference characters for Figures 1-9, and the size of the numbers, letters and reference characters for Figures 2-4. Applicants respectfully request that the Examiner kindly consider the proposed replacement figures for Figures 1-9 submitted herewith that incorporate the desired changes and which comply with 37 CFR 1.84.

II. Objections to the Claims

The Office Action objects to Claims 18-27 as being dependent upon a rejected base claim, but indicates that the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have rewritten Claims 18-27 in independent form, and submits that the amendments overcome the objection.

III. Claim Rejections under 35 U.S.C. § 112, second paragraph

The Office Action rejects Claims 28 and 51 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Office Action rejects Claim 28 for reciting variants of a polypeptide that can be SEQ ID NO:3, since SEQ ID NO:3 is a polynucleotide sequence and not a polypeptide sequence. Claim 28 has been amended to claim variants and polypeptides encoded by a polynucleotide as defined in SEQ ID NO:3, and Applicants submit that this amendment overcomes the rejection.

The Office Action rejects Claim 51 as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have rewritten the claim in independent form, and Applicants submit that this amendment overcomes the rejection.

For at least the foregoing reasons, Applicants respectfully request reconsideration and removal of the rejections and allowance of Claims 28 and 51.

IV. Claim Rejections under 35 U.S.C. § 112, first paragraph

Claims 28-29, and 50 were rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Claims 29 and 50 have been canceled and therefore the rejection is moot with respect to those claims.

The Office Action rejected Claim 28 for reading on Met-JHR alternatively spliced isoforms. The Office Action stated “applicants have not provided a written description of these molecules, if they exist, because there is no structure/function relationship between these molecules and the sequences recited in claim 1.” Applicants have amended Claim 28 such that it no longer recites Met-JHR alternatively spliced isoforms, and submit that the amendment overcomes the rejection.

For at least the foregoing reasons, Applicants respectfully request reconsideration and removal of the rejection and allowance of Claim 28.

V. Double Patenting Rejection

Claims 1, 3-5, 7-14, 44-47 and 50-51 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 6,326,165. The Office Action states that “the instant claims read on polynucleotides which encode a bHLH-PAS polypeptide and are capable of hybridizing under stringent conditions to SEQ ID NO:1-3 and 6 or are capable of hybridizing to polynucleotides encoding SEQ ID NO:4-5 or are capable of hybridizing to a riboprobe which is the reverse transcript of a portion of SEQ ID NO:1 under stringent conditions. Therefore, these claims read on, and include, polynucleotides which are identical to SEQ ID NO:1-3, 6 or sequences which encode SEQ ID NO:s 4-5 and hence are anticipated by the claims in the ‘165 patent. With regard to SEQ ID NO:7, the instant claims differ from the patented claims only in the recitation of SEQ ID NO:7 in the context of open language rather than closed language and in the context of sequences which hybridize to SEQ ID NO:7 under stringent conditions; however, the patented claims can anticipate the instant claims because the instant claims also read on a nucleic acid which can only contain the recited SEQ ID NO:7.”

Claims 1, 3-5, 7-8, and 50 have been canceled and therefore the rejection is moot with respect to these claims. If, after considering the amendments attached hereto, the double-patenting rejection is maintained against Claims 9-14, 44-47, and 51, Applicants will file a terminal disclaimer over U.S. Patent No. 6,326,165.

VI. Claim Rejections under 35 U.S.C. §102

Claims 1, 3-5 and 7-8 are rejected under 35 U.S.C. § 102 as being anticipated by Turner *et al.* (Archives of Insect Biochemistry and Physiology, Vol. 30, 1995, pp. 133-147). Claim 1, 3-5, and 7-8 have been canceled, and it is submitted that the rejection is therefore moot.

For at least the foregoing reasons, Applicants respectfully request reconsideration and removal of the rejections and allowance of Claims 9-14, 18-28, 44-47, and 51. The foregoing is submitted as a full and complete Response to the Office Action mailed November 20, 2003. No additional fees are believed due; however, the Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment to Deposit Account No. 19-5029. This Response places all claims in the present application in condition for allowance, and such action is courteously solicited. The Examiner is invited and encouraged to contact the undersigned attorney of record if such contact will facilitate an efficient examination and allowance of the application.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'William L. Warren', is written over a horizontal line.

By: William L. Warren
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